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| EXAMINER | |
|---|---|
| BRINEY III, WALTER F | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2644 | |

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/051,194 | TISCHER, STEVEN N. | |
| | Examiner | Art Unit | |
| | Walter F Briney III | 2644 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *10 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-69* is/are pending in the application.

4a) Of the above claim(s) *68 and 69* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

Newly submitted claims 68 and 69 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claim 19 was originally directed toward the combination of a user-programmable audio alert system containing a plurality of subcombinations defined as audio alert triggering events. The details relating to the plurality of subcombinations was, however, not part of the original scope of the claims. Thus, the limitations directed toward *a ringing signal* and *an electronic mail message*, as claimed in claims 68 and 69, respectively, constitute new matter that was not originally presented.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 68 and 69 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7-12, 20-26, 29-34, 42-48, 51-56, and 64-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan (US Patent 6,496,692).

Claim 1 is limited to *a user-programmable audio alert system*. Shanahan discloses a *user-programmable* and a computer device (i.e. *audio alert system*) (abstract) that generates *an audio alert*. The alert is generated by an *emitter* (figure 7, element 540). The alert is stored in an array (figure 7, element 550) *programmed to detect an occurrence of an audio alert triggering event and relate the audio alert triggering event to the audio alert* (column 7, line 60-column 8, line 5). Therefore, when the *audio alert triggering event occurs, the data structure detects the occurrence of the audio alert triggering event and causes the device to emit the audio alert related to the triggering event* (column 10, lines 1-11).

As indicated in the proceeding section, Shanahan does not explicit disclose how the audio alerts are stored in memory. Therefore, Shanahan anticipates all limitations of the claim with the exception of *an array*. However, the examiner takes Official Notice of the fact that *arrays* (and *lists*) were well-known data structures at the time of the invention. Data structures are used to simplify the organization of data in a computer, especially when programming with object-oriented languages. Any number of elements, or in this case, audio alerts, can be accessed and modified with ease with high-level function calls. It would have been obvious to one of ordinary skill in the art at the time of the invention to organize the digitally-stored audio alerts into an *array* (or *list*) to take advantage of their ease of use in programming.

Claims 24 and 46 are rejected for the same reasons as claim 1.

Claim 2 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses *an audio alert created by a user* (column 9, lines 24-41). Therefore, Shanahan makes obvious all limitations of the claim.

Claims 25 and 47 are rejected for the same reasons as claim 2.

Claim 3 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses *an array programmed by a user* (column 7, line 60-column 8, line 5). Therefore, Shanahan makes obvious all limitations of the claim.

Claims 26 and 48 are rejected for the same reasons as claim 3.

Claim 4 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses *storage for storing data* (figure 7, element 550) *and wherein the array comprises an array stored in the device* (column 10, lines 1-11). Therefore, Shanahan makes obvious all limitations of the claim.

Claim 7 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses *a wireless telephone* (column 1, line 43-column 2, line 20). Therefore, Shanahan makes obvious all limitations of the claim.

Claims 20, 29, 42, 51, and 64 are rejected for the same reasons as claim 7.

Claim 8 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses editing alerts using the programmer, which resides in a *personal computer* (figure 4B, elements 90, 95). Therefore, Shanahan makes obvious all limitations of the claim.

Claims 30 and 52 are rejected for the same reasons as claim 8.

Claim 9 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses embedding the programmer, which performs editing features, into the device. The device is a cellular telephone (column 1, line 43-column 2, line 20) programmed using a *keypad.* Therefore, Shanahan makes obvious all limitations of the claim.

Claims 31 and 53 are rejected for the same reasons as claim 9.

Claim 12 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses detecting incoming calls (i.e. *audio alert triggering event*) and alerting a user with specialized audio signatures that are unique to the person who called (i.e. *programmable to modulate the audio alert according to an external variable associated with the audio alert triggering event*) (column 7, line 60-column 8, line 5). Therefore, Shanahan makes obvious all limitations of the claim.

Claims 23, 34, 45, 56, and 67 are rejected for the same reasons as claim 12.

Claim 10 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses a personal computer (i.e. *device*) including a programmer, which creates audio alerts; the computer has *a transmitter* (figure 2, element 32). The computer programs (i.e. *wherein the device is programmable to transmit the audio alert to...*) the programmable device (i.e. *another device*). The programmable device has *storage for storing data* (figure 7, element 550) *and an emitter for emitting the audio alert* (figure 7, element 540). Therefore, Shanahan makes obvious all limitations of the claim with the exception of *wherein the device has an emitter.* The examiner takes Official Notice of the fact that speakers are well known peripherals in computers. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a speaker

in the computer/programmer of Shanahan for the purpose of previewing the audio alerts being edited for use in the user-programmable device.

Claims 21, 32, 43, 54, and 65 are rejected for the same reasons as claim 10.

Claim 11 is limited to *the system of claim 10*, as covered by Shanahan. Shanahan discloses *transmitting the* audio alerts (i.e. *array*) *to the* programmable (i.e. *another device*) (column 10, lines 1-11). Therefore, Shanahan makes obvious all limitations of the claim.

Claims 22, 33, 44, 55, and 66 are rejected for the same reasons as claim 11.

Claims 6, 28, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Mäkeläet et al. (US Patent 6,501,967).

Claim 6 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses programmer integrated into the phone, and a method of programming using the keypad, and a way of sampling and editing sounds, but does not disclose the ability to create original user alerts. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the audio alert comprises a sequence of numbers and wherein each number further comprises a distinct musical tone.* Mäkeläet teaches a way to program user-original songs into a cellular telephone using the keypad, where each musical note is represented by a particular number sequence (column 4, lines 31-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the means to program user-original music represented as numbers as taught by Mäkeläet for the purpose of generating desired melodies for use as alerting tones.

Claims 28 and 50 are rejected for the same reasons as claim 6.

Claims 13, 15, 35, 37, 57, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Kennedy, III et al. (US Patent 6,535,743).

Claim 13 is limited to *the system of claim 12*, as covered by Shanahan. Shanahan discloses providing audio alerting for incoming calls, but does not include way to vary audio signals based on GPS information. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises global positioning information*. Kennedy teaches implementing a GPS tracking unit into a cellular telephone so that customized audio alerting directions may be downloaded and played to a user in case they are lost (column 2, line 58-column 3, line 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the GPS tracking and direction system as taught by Kennedy into the cellular telephone of Shanahan for the purpose of providing directions to a user if they become lost.

Claims 35 and 57 are rejected for the same reasons as claim 13.

Claim 15 is limited to *the system of claim 12*, as covered by Shanahan. Shanahan discloses providing audio alerting for incoming calls, but does not include way to vary audio signals based on directional information. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises directional information.* Kennedy teaches implementing a GPS tracking unit into a cellular telephone so that customized audio alerting *directions* may be downloaded and played to a user in case they are lost (column 2, line 58-column 3,

line 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the GPS tracking and direction system as taught by Kennedy into the cellular telephone of Shanahan for the purpose of providing directions to a user if they become lost.

Claims 37 and 59 are rejected for the same reasons as claim 15.

Claims 14, 36, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Skorko (US Patent 6,560,466).

Claim 14 is limited to *the system of claim 12*, as covered by Shanahan. Shanahan discloses providing user-defined alert tones, but does not modify their behavior in response to relative distance. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises relative distance information*. Skorko teaches modulating the volume of a ring tone (i.e. alert tone) based on the distance of a body from the phone to prevent scaring users when they are close to the phone and receive a request for a ring tone (column 1, lines 25-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the volume modulating apparatus as taught by Skorko into the cellular phone of Shanahan for the purpose of not scaring someone that is close to a ringing telephone.

Claims 36 and 58 are rejected for the same reasons as claim 14.

Claims 16, 38, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Mulla et al. (US Patent 6,311,896).

Claim 16 is limited to *the system of claim 12*, as covered by Shanahan. Shanahan discloses providing audio alerts, in particular, when an incoming call is detected, but provides no means to handle other types of data. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises retail information.* Mulla teaches integrating a bar code scanner into a cellular telephone (column 12, lines 14-18) to provide a way for consumers to shop or prepare their shopping lists (column 9, lines 61-65). The scanner provides an audio indication of the success of scanning activities (i.e. *retail information*) (column 9, lines 23-45) (table 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to integrate the bar code scanner as taught by Mulla into the cellular telephone of Shanahan for the purpose of allowing consumers to shop or prepare their shopping lists with the device.

Claims 38 and 60 are rejected for the same reasons as claim 16.

Claims 5, 17, 18, 19, 27, 39-41, 49, and 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Mulla and further in view of Lemelson (US Patent 5,945,656).

Claim 17 is limited to *the system of claim 16*, as covered by Shanahan in view of Mulla. Mulla teaches providing product and other information to a consumer from a merchant, however, Mulla discloses no details as to how to alert and display this information to the consumer. Therefore, Shanahan in view of Mulla makes obvious all limitations of the claim with the exception *wherein an audio alert is modulated according to product information*. Lemelson teaches generating audio-based product information

with respect to a scanned bar code to prevent false scanning of unrelated bar codes (column 7, lines 20-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the audio alert system of Mulla to transducer scanned bar codes into readily understandable audio alerts that relate to product information for the purpose of insuring that a scanned bar code relates to a particular item.

Claims 39 and 61 are rejected for the same reasons as claim 17.

Claim 18 is limited to *the system of claim 16*, as covered by Shanahan in view of Mulla. Mulla teaches providing price and other information to a consumer from a merchant, however, Mulla discloses no details as to how to alert and display this information to the consumer. Therefore, Shanahan in view of Mulla makes obvious all limitations of the claim with the exception *wherein an audio alert is modulated according to price information*. Lemelson teaches generating audio-based price information with respect to a scanned bar code to prevent false scanning of unrelated bar codes (column 7, lines 20-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the audio alert system of Mulla to transducer scanned bar codes into readily understandable audio alerts that relate to product information for the purpose of insuring that a scanned bar code relates to a particular item.

Claims 40 and 62 are rejected for the same reasons as claim 18.

Claim 5 is limited to *the system of claim 1*, as covered by Shanahan. Shanahan discloses alerting a user of incoming telephone calls using different signature alerts (i.e. *a plurality of alerts*). Shanahan does not disclose other audio alerting events besides incoming call alerting. Therefore, Shanahan makes obvious all limitations of the claim

with the exception *wherein the array comprises a plurality of arrays, and wherein each array is programmed to detect the occurrence of one of a plurality of audio alert triggering events and relate the one of the plurality of audio alert triggering events to one of the plurality of audio alerts.* For the same reasons given in any of claims 13-18, it would have been obvious to one of ordinary skill in the art at the time of the invention to import any of the aforementioned plurality of audio alerts into the cellular phone of Shanahan.

Claims 19, 27, 41, 49, and 63 are rejected for the same reasons as claim 5 and the reasons presented in the proceeding section.

***Response to Arguments***

Applicant's arguments with respect to claims 1-69, filed 10 June 2004, have been fully considered but they are not persuasive.

With respect to independent claims 1, 24, and 46, the applicant has amended the claim language directed toward a data structure such that either a list or array is used. Clearly, lists and arrays are merely specific types of data structures. However, it is respectfully submitted that, even in the absence of explicit teaching in the current references, these limitations do not distinguish the claimed invention from the prior art. More detail is provided in the preceding section.

With respect to independent claims 19, 41, and 63, the applicant has amended the claim language directed toward the audio alerts, specifying that each audio alert is distinctive. The examiner respectfully disagrees that this distinguishes the claimed

invention from the prior art. In particular, the examiner previously rejected the aforementioned claims by reasoning that any number of a plurality of audio alerts is equally beneficial to the operation of the device disclosed by Shanahan. See the office action, filed 08 March 2004; in particular, the rejection of claims 5, 19, 41, and 63 on page 10. Furthermore, each of the external variables discussed in claims 13-18 are clearly distinctive over each other and require distinct triggering events to occur. As an example, consider claims 13 and 14. The rejection of claim 13 included reference to Kennedy, who teaches supplying GPS directions upon request. The rejection of claim 14 included reference to Skorko, who teaches adjusting the volume of a ring tone based on the proximity of a user. Clearly, receiving directions and receiving a ring tone are distinct events.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F Briney III whose telephone number is 703-305-0347. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WFB
11/10/04

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